DOCUMENT RESUME

ED 227 385 CG 016 513

AUTHOR Cicirelli, Victor G.
TITLE An Attachment Model of Sibling Helping Behavior in Old Age.
SPONS AGENCY NRTA-AARP Andrus Foundation, Washington, D.C.
PUB DATE Aug 82
NOTE 29p.; Paper presented at the Annual Convention of the American Psychological Association (90th, Washington, DC, August 23-27, 1982). Best copy available.
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Attachment Behavior; Behavior Patterns; Emotional Response; Gerontology; *Helping Relationship; *Interpersonal Relationship; *Older Adults; Path Analysis; Psychological Needs; *Siblings; *Social Support Groups

ABSTRACT

Sibling relationships are not only maintained throughout life in most cases, but assume considerable importance in old age. Siblings provide psychological support for each other as well as more tangible forms of helping and caregiving. In order to investigate variables leading to sibling help in the area of psychological support, a path model based on attachment theory was constructed in which siblings' feelings of attachment were viewed as leading to attachment behaviors and in turn to sibling help. Sibling obligation and sibling conflict were also hypothesized to be precursors to attachment behaviors and sibling help. Interview data were obtained in regard to 93 sibling relationships from 50 elderly adults aged 62-94. Analyses of results indicated that feelings of attachment had the strongest influence on sibling help, while attachment behaviors had a smaller effect. Stronger sibling obligation resulted in less sibling help. The findings support the argument that sibling rivalry declines in late adulthood. (Author/JAC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

BEST COPY AVAILABLE

ED227385

An Attachment Model of Sibling Helping Behavior in Old Age

Victor G. Cicirelli

Purdue University

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Victor G. Cicirelli

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CG 016513

Paper presented at the 90th Annual Convention of the American Psychological Association, Washington, D. C., August 23-27, 1982.

Abstract

An Attachment Model of Sibling Helping Behavior in Old Age

In order to investigate variables leading to sibling help in the area of psychological support, a path model based on attachment theory was constructed in which siblings' feelings of attachment were viewed as leading to attachment behaviors and in turn to sibling help. Sibling obligation and sibling conflict were also hypothesized to be precursors to attachment behaviors and sibling help. Interview data were obtained in regard to 93 sibling relationships of elderly aged 62-94. Results indicated that feelings of attachment had the strongest influence on sibling help, while attachment behaviors had a smaller effect. Stronger sibling obligation resulted in less sibling help.

An Attachment Model of Sibling Helping Behavior in Old Age[1]

Victor G. Cicirelli[2]
Purdue University

Relationships between siblings are not only maintained throughout life in most cases, but they can assume considerable importance in old age (Allan, 1977; Cicirelli, 1980,1982; Ross & Milgram, 1982; Troll, 1971). Siblings provide psychological support for each other as well as more tangible forms of helping and caregiving activities.

Theories of prosocial and altruistic behavior, used to explain specific instances of helping another, do not deal with the maintenance of helping within an ongoing relationship over a long period of time. Attachment theory (Ainsworth, 1972; Bowlby, 1979,1980), in contrast, may be of value in explaining the bond between siblings and the helping behavior which stems from that bond. Attachment refers to an emotional or affectional bond between two people; it is essentially being identified with, having love for, and having the desire to be with the other person, and represents an internal state within the individual. Attachment behaviors are behaviors which seek to attain proximity and contact with the attached person. Arising somewhat later developmentally, protective behavior seeks to protect the attached person. It is distinct from attachment behavior in that it is concerned with preserving or restoring the threatened existence

of the attached figure rather than merely maintaining or restoring proximity. According to Bowlby, attachment behavior does not end in childhood, but persists into adulthood.

To explain the persistence of attachment over geographical distance and time, closeness and contact on a symbolic level through the mechanism of identification (Fromm, 1956; Hall & Lindzey, 1970) has been proposed (Cicirelli, in press). In identification, the individual incorporates the features of the loved person into his/her own personality. Thus, for adults, attachment can be defined as the propensity for psychological closeness and contact, although this tendency may be only intermittently reinforced with physical closeness and contact. This view leads to such criteria as feelings of closeness and perceived similarity to the attached person as evidence of attachment; these may be determined by verbal report rather than the traditional observations of behavior used to indicate attachment.

Attachment behavior in adulthood is defined as a class of behaviors including interaction or communication over a distance to maintain psychological communication and contact in addition to periodic reunions to re-establish physical closeness and contact (e.g., residential proximity, visiting, telephoning, letter-writing, and so on). In adulthood, attachment and attachment behaviors are regarded as independent, with attachment behavior a consequence of attachment. Similarly, attachment behaviors are regarded as preceding protective (or helping) behavior, for some contact and communication must take place before the need for

help can be ascertained and actual helping can occur.

Although attachment theory was originally applied to the relationship between parent and child, it can be extended to the relationship between siblings inasmuch as sibling relationships are a part of the total family interactional system (Troll & Smith, 1976). The concept of attachment has been applied to the sibling relationship by various authors (Bank & Kahn, 1982; Cicirelli, 1982; Dunn & Kendrick, 1982; Ross, Dalton, & Milgram, 1980; Ross & Milgram, 1982). Sibling attachment comes about through a generalization or transference of the basic attachment bond to the mother through the association of siblings with the parents within the total family scene. While in most cases the young child's siblings do not contribute to basic survival needs, they can and do provide direct reinforcement in other areas (such as social needs and needs for comfort). According to Bank and Kahn, in situations where the parent is uncaring or absent, an extraordinary sibling attachment or loyalty can develop. They see the extent of sibling attachment as highly dependent on the quantity and quality of the relationship in childhood. Further, they see sibling attachment as having a transitional function in helping the child to achieve separation from the parent. Ross, Dalton, and Milgram viewed the origins of sibling closeness in old age as arising in childhood experiences as members of close families. Sibling contact in later years evoked feelings of belonging and family unity from childhood.

Evidence for sibling feelings of attachment (closeness of feeling) and attachment behaviors (proximity, visiting, and telephoning) has been reviewed elsewhere (Cicirelli, 1980, 1982). While there is considerable variability in these aspects of the sibling relationship, most elderly report some degree of positive feelings toward their siblings and maintain some level of contact.

There is less evidence in regard to sibling helping behavior, although some researchers (Cumming & Schneider, 1961; Townsend, 1957) have noted that some siblings provide extensive caregiving in old age. More frequently, siblings stand ready to help, with such help called for only on rare occasions (Cicirelli, 1979; Cumming & Schneider, 1961). Cicirelli (1979, 1980, 1982) investigated kin help for the elderly in regard to sixteen types of help (homemaking, home health care, business dealings, psychological support, and so on) and found that up to 7% of the elderly listed a sibling as the primary source of help in the various areas. Some 60% of the elderly regarded their siblings as a source of occasional and supplementary help. Psychological support emerged as the area in which the greatest amount of sibling help was received and desired in the future. By psychological support we mean those non-tangible forms of help which contribute to emotional security and well-being in the individual, e.g., serving as a confidante, giving understanding or advice, giving warmth and affection, being available to give tangible help if needed, and cheering up the sibling. The importance of

psychological support from siblings to the elderly has been noted in the form of improved morale (Cumming & Henry, 1961) and emotional security (Cicirelli, 1977). Because it appears to be the most important type of sibling help for the elderly, psychological support was the form of sibling help investigated in the present study.

Relationship of feelings of attachment to helping. While there has been a great deal of research on the topic of attachment, most of it has been concerned with the nature of the attachment bond in infancy and its formation and maintenance. Two aspects of attachment theory as propounded by Bowlby (1979, 1980) which have received little research attention are its extension across the life span and the protection of the attached figure; the present study is concerned with these topics. According to Bowlby, the desire to protect the attached figure develops from the need to preserve the attachment bond. Protection, in the broad sense, can involve not only defense against danger but other helping behaviors which lead to the well-being of the attached person.

An early indication of helping behavior was noted in a recent study (Waters, Wippman, & Sroufe, 1979) in which 18-month-old children who demonstrated a secure attachment to their mothers were observed to do more toy-sharing with the mother than did children who did not have such a secure attachment. In certain primates, Suomi (1982) reported that same-sex sibling relationships

were strengthened in adolescence and were marked by mutual defense and grooming (protective/helping behaviors). Bank and Kahn (1982) found that close positive sibling relationships led to helping and protecting each other; where there was extreme loyalty between siblings, this could be done at considerable self-sacrifice. Finally, Adams(1968) studied sibling relationships in middle-aged adults; results indicated that when same-sex siblings were close affectionally, there was more helping behavior. There is, therefore, some support in the literature for a relationship between feelings of attachment and helping or protective behavior.

Rivalry and obligation. These two variables merit consideration in relation to sibling help because, like feelings of attachment, they arise in early family life and are typically of long duration. The first is sibling rivalry, which originates in competition for recognition, love, and approval early in life. It is typically manifested in conflict and competition between siblings. Although rivalry has been found to be an important factor in sibling relationships early in life (Bank & Kahn, 1982; Sutton-Smith & Rosenberg, 1970), there has been some controversy over its persistence into old age. On the one hand, there is some support for the idea that older siblings still experience rivalry (Ross & Milgram, 1980, 1982; Troll, 1975; Troll, Miller, & Atchley, 1978), while on the other there is evidence that sibling rivalry dissipates with aging (Allan, 1977; Cicirelli, 1980, 1982). If rivalry is indeed important in sibling relationships in old age, one would expect it to be associated

with diminished sibling help.

The second variable to be considered is the sense of obligation or duty between siblings. There is a social norm that family members should maintain contact and help each other (Wrightsman & Deaux, 1981), and if an individual feels this obligation, there will be more helping behavior. Such feelings of obligation have been found to underlie adult children's visiting and help to elderly parents (Troll, Miller, & Atchley, 1978) and characterize sibling relationships as well, although perhaps to a lesser extent than is the case with parents (Adams, 1968). Adams found some siblings' visiting and helping to be motivated more by closeness of feeling, whereas others were motivated more by duty.

Helping model. The objective of the present study was to determine the contribution of attachment theory in explaining sibling help in old age and to evaluate the relative contributions of sibling rivalry and sibling obligation in such an explanation.

To accomplish this, a causal path model (Blalock, 1968; Asher, 1976) was constructed on the basis of the theory. The hypothesized model is presented in Figure 1. As noted earlier, attachment theory provides a temporal ordering of the variables, with feelings of attachment leading to attachment behaviors and in turn to helping behaviors. Sibling rivalry (sibling conflict) and sibling obligation are hypothesized to be causally prior to both attachment behaviors and sibling help.

- - - - - - - - - - - - - - - - -
Insert Figure 1 about here
- - - - - - - - - - - - - - - - -

Method

Sample. Subjects of the study were 50 elderly adults with at least one living sibling. These elderly were randomly sampled from a group of 300 persons over age 60 who were identified through a block sampling procedure in an earlier study (Cicirelli, 1979). Of 64 elderly with siblings selected in this way, 50 agreed to be interviewed regarding sibling relationships, 2 were too ill to be interviewed, 1 had died, 4 could not be contacted, and 7 refused to be interviewed.

All subjects resided in Lafayette, Indiana, a city of about 60,000 people consisting largely of whites from the lower and middle classes. Age of subjects ranged from 62-94, with a mean age of 76.4 years (S.D. = 6.75). There were 19 men and 31 women. They had an average of 2.1 living siblings, from an original sibship of 4.2. Mean educational level on the Hollingshead scale was a figure which corresponded to some high school, and occupational level of the main breadwinner in the household before retirement was at a level between skilled manual occupations and clerical, retail sales, and technician occupations. Sibling age ranged from 52 to 96, with a mean age of 71.38 (S.D. = 10.63), for a total of 93 siblings.

Procedure. All elderly subjects were interviewed in depth in their own homes regarding their relationship with each sibling. The major portion of the interview-questionnaire was structured in format, and required about an hour to administer. Interviewers were two male graduate students in Clinical Psychology who had had previous experience interviewing elderly.

Measures. Five variables were considered in the model, with measures of each obtained from the interview-questionnaire data. Each will be described in turn.

Feelings of attachment. Attachment in adulthood was defined as the propensity or tendency for psychological closeness and contact, with identification as the mechanism through which symbols are used to establish psychological closeness and contact. This view of attachment leads to such criteria as feelings of closeness (or love) and perceived similarity (through identification) as evidence of attachment to the sibling. On an operational level, one can assess the individual's verbal reports of felt closeness, value consensus, behavior consensus (compatibility) and trait consensus as indices of symbolic contack and psychological closeness.

Such measures were available from the interview-questionnaire. Adaptations of Adams' (1968) measures of closeness of feeling and agreement in values were used. Also ratings of the sibling's traits (Itkin, 1952) were included in the questionnaire; a trait score with an internal consistency of .93 was obtained by summing 20 rating items. (It is held that an individual who has stronger attachment will identify with the sibling more strongly and will rate the sibling's traits more positively.) Finally, five questionnaire items assessed compatibility with the sibling, yielding a total compatibility score with an internal consistency of .77. Since we wished to ascertain whether the four indicators of feelings of attachment were sufficiently interrelated to

justify their use as a measure of the concept, as well as to provide an objective means of combining the four different scores, a principal components factor analysis was used. Results indicated only a single factor with an eigenvalue greater than one; this factor accounted for 66% of the variance. Factor loadings for the four scores were, respectively, .65, .76, .65, and .87. For use in the path analysis, factor scores were derived, expressed as standard scores with a mean of 50 and a standard deviation of approximately 10.

Attachment behaviors. Three questionnaire items assessed the individual's attachment behaviors to the sibling: proximity to the sibling, frequency of visiting, and frequency of telephoning. Other things being equal, the person who is more attached will live closer, and visit and telephone the sibling more frequently than one who is less attached. Each item was measured on a nine-point scale. Correlations between the three items ranged from .64 to .87. The three items were summed to yield the measure of attachment behavior. Scores could range from 3 to 27, with high scores representing stronger attachment behaviors.

Sibling conflict. Rivalry between siblings was measured by five items dealing with extent of argument with the sibling, sibling bossiness, competition with the sibling, frequency of conflict, and number of areas in which conflict occurs. Each was measured on a five-point scale, and the items summed to yield a total score for sibling conflict. Scores could range from 4 to 24, with a high score representing greater conflict. Internal

consistency reliability was .89.

Sibling obligation. An adaptation of the Filial Expectancy Scale (Seelbach & Sauer, 1977) was used to obtain a measure of the obligation which the elderly person felt toward the sibling. (An item dealing with financial support was deleted from the scale, since relatively little financial support is provided between siblings.) Each of the items was rated on a five-point scale to indicate extent of agreement with the item. The total sibling obligation score was obtained by summing the five item scores. Scores ranged from 5-25, with a high score indicating greater sibling obligation. Internal consistency reliability was .73, computed for the subjects of the study.

Sibling help. Sibling help in the area of psychological support was measured by five items which assessed the amount of help given to siblings in willingness to help if needed, cheering up spirits, confidante, readiness to help in a crisis, and adjustment to aging. The extent of psychological support in each was measured on a five-point scale. The five items were summed to yield a total score which could range from 5 to 25, with a high score indicating more sibling help. Internal consistency reliability was .82.

Results

The intercorrelations of the five measures and the means and standard deviations of each are presented in Table 1. The majority of elderly people interviewed reported rather close feelings of attachment to their siblings. All were in some

kind of regular contact with their siblings, although the mean level of attachment behaviors was only moderate. About half reported more than rare conflict with their siblings, but the overall level of conflict was low. The sense of obligation toward siblings, weaker than the obligation displayed by middle-aged adult children toward elderly parents, was only moderate. Substantial levels of psychological support were reported.. The strongest correlation with sibling help was found for feelings of attachment, followed by that with attachment behaviors. Sibling obligation showed a weak negative correlation with sibling help and with feelings of attachment, a fact which was consistent with Adams' (1968) observation that some sibling relationships were characterized by affectional closeness and others by obligation.. Sibling conflict showed only a weak correlation with sibling obligation.

- - - - - - - - - - - - - - -

Insert Table 1 about here

- - - - - - - - - - - - - - -

Multiple regression analysis was used to determine partial regression coefficients for predictors at each link of the hypothesized path model. Only those linkages with partial regression coefficients significant at the .05 level were retained in the model. Also, any path coefficient smaller than .10 was regarded as negligible and that linkage deleted.

The limitations of the method are recognized. First, the measures of the variables of interest are fallible measures, implying a certain instability of the path coefficients. Second,

the model does not attempt to present an exhaustive analysis of all variables which determine sibling help but only those of interest. Also, various background variables have not been included in the model. Finally, it is assumed that the assumptions of the method have been met to a reasonable degree. In spite of limitations, it is felt that the analysis will bring out some of the hypothetical model.

The path diagram depicting the reduced path model resulting from the analysis is presented in Figure 2. The path coefficients shown are standardized partical regression coefficients.

- - - - - - - - - - - - - - - - -

Insert Figure 2 about here

- - - - - - - - - - - - - - - - -

Inspection of the path diagram reveals that feelings of attachment, attachment behaviors, and sibling obligation all have direct effects on sibling help, with feelings of attachment having the strongest effect. Feelings of attachment and sibling obligation also have indirect effects on sibling help through their effects on attachment behaviors. Effects of sibling conflict were negligible and were deleted from the model.

The model can also be described by sets of structural equations in which unstandardized partial regression coefficients are used. The squared multiple correlation coefficient is also presented with each equation.

The equation for sibling help is as follows;

Sibling help = .29 Feelings of attachment + .15 Attachment behaviors
- .18 Sibling obligation + 2.78 (R^2 = .60)

Thus, sibling help is a function of feelings of attachment, attachment behaviors and sibling obligation. These variables explain 60% of the variance in sibling help.

The equation for attachment behaviors is as follows:

Attachment behaviors = .21 Feelings of attachment + .27 sibling obligation - 3.15 (R^2 = .16)

Here attachment behaviors is a function of feelings of attachment and sibling obligation. However, these variables explain only 16% of the variance in attachment behaviors, indicating that other variables may also be important in determining proximity, visiting, and telephoning patterns.

The decomposition of effects in the model is shown in Table 2. Given the causal ordering proposed by the model, the influence of feelings of attachment on sibling help was more than three times as great as that of attachment behaviors. The influence of feelings of attachment on sibling help is in part indirect, mediated by attachment behaviors. However, the contribution of the indirect path to the total effect is quite small. The effect of sibling obligation on sibling help is somewhat paradoxical, with the direct effect of obligation acting to decrease sibling help and the indirect effect acting to increase sibling help through the effect of obligation on attachment behaviors. The resultant total effect of obligation on help, however, is a negative one.

- - - - - - - - - - - - - - -

Insert Table 2 about here

- - - - - - - - - - - - - - -

Discussion

The application of Bowlby's (1979,1980) theory of attachment in adult life, and particularly the concept of protective behavior as an outgrowth of the basic attachment bond, to the sibling relationship was given some empirical support by the strong relationship between feelings of attachment and sibling help. Very simply, if one feels close to a sibling, he/she gives help to that sibling when the occasion arises. While having an established pattern of contact with the sibling is conducive to helping behavior, it does not have a major determining influence.

Help to siblings appears to rest on feelings of attachment rather than on duty, and in fact feeling a sense of obligation to help one's sibling actually appears to result in less help. Adams' (1968) finding that some siblings were motivated by their feelings and others by obligation is borne out by the present findings. Clearly, help freely given because one wants to seems to flow more freely than help given because one feels one should.

The study lends further support to those who argue that sibling rivalry declines in late adulthood (Allan, 1977; Cicirelli, 1980, 1982). Those elderly who were interviewed reported very low levels of rivalrous conflict with siblings, and this conflict was not related to reduced sibling closeness (feelings of attachment), sibling contact (attachment behaviors), or sibling help. There was a weak relationship to sibling obligation, however, suggesting that those who experience rivalrous conflict

may maintain their relationships with siblings out of a sense of duty rather than for affectional reasons. For most elderly, rivalry with siblings appears to have mellowed or perhaps to have become latent, becoming overt only under stress. Results do not support those (e.g., Ross & Milgram, 1982) who hold that rivalry continues into old age.

References

Adams, B. N. Kinship in an urban setting. Chicago: Markham Publishing Co., 1968.

Ainsworth, M. D. Attachment and dependency: A comparison. In J. L. Gewirtz (Ed.), Attachment and dependency. New York: Wiley & Sons, 1972.

Allan, G. Sibling solidarity. Journal of Marriage and the Family, 1977, 39, 177-184.

Asher, H. B. Causal modeling. Beverely Hills, California: Sage Publications, 1976.

Bank, S. P. & Kahn, M. D. The sibling bond. New York: Basic Books, 1982.

Blalock, H. M., Jr. Theory building and causal inferences. In H. M. Blalock and A. B. Blalock (Eds.), Methodology in social research. New York: McGraw-Hill, 1968.

Bowlby, J. The making and breaking of affectional bonds. London: Tavistock Publications, 1979.

Bowlby, J. Attachment and loss. Vol. III. Loss: Stress and depression. New York: Basic Books, 1980.

Cicirelli, V. G. Relationship of siblings to the elderly person's feelings and concerns. Journal of Gerontology, 1977, 131, 309-317.

Cicirelli, V. G. Social services for elderly in relation to the kin network. Report to the NRTA-AARP Andrus Foundation, May 31, 1979.

Cicirelli, V. G. Sibling relationships in adulthood. In L. W. Poone (Eds.), Aging in the 1980's. Washington, D. C.: American Psychological Association, 1980.

Cicirelli, V. G. Sibling influence throughout the life span. In M. E. Lamb & B. Sutton-Smith (Eds.), Sibling relationships: Their nature and significance across the lifespan. Hillsdale, N. J.: Lawrence Erlbaum Associates, 1982.

Cicirelli, V. G. An attachment model of sibling helping behavior in old age. Journal of Marriage and the Family, in press.

Cumming, E. & Schneider, D. Sibling solidarity: A property of American kinship. American Anthropologist, 1961, 63, 498-507.

Dunn, J. & Kendrick, C. Siblings and their mothers: Developing relationships within the family. In Lamb, M. E. & B. Sutton-Smith (Eds.), Sibling relationships: Their nature and significance across the life span. Hillsdale, N. J.: Lawrence Erlbaum Associates, 1982.

Fromm, E. The art of loving. New York: Harper & Row, 1956.

Hall, C. S. & Lindzey, G. Theories of personality . (2nd ed.) New York: Wiley, 1970.

Itkin, W. Some relationships between intra-family attitudes and preparatental attidues toward children. Journal of Genetic Psychology, 1952, 80, 221-252.

Ross, H. G., Dalton, M. J., & Milgram, J. I. Older adults' perceptions of closeness in sibling relationships. Paper presented at the 33rd Annual Scientific Meeting of the Gerontological Society, San Diego, California, November, 1980.

Ross, H. G., & Milgram, J. I. Rivalry in adult sibling relationships: Its antecedents and dynamics. Paper presented at the Annual Meeting of the American Psychological Association, Montreal, Canada, September, 1980.

Ross, H. G. & Milgram, J. I. Important variables in adult sibling relationships: A qualitative study. In Lamb, M. E. & B. Sutton-Smith (Eds.), Sibling relationships: Their nature and significance across the life span. Hillsdale, N. J.: Lawrence Erlbaum Associates, 1982.

Seelbach, W. & Sauer, W. Filial responsibility expectations and morale among aged persons. Gerontologist, 1977, 17, 421-425.

Suomi, S. J. Sibling relationships in nonhuman primates. In Lamb, M. E. & B. Sutton-Smith (Eds.), Sibling relationships: Their nature and significance across the life span. Hillsdale, N. J.: Lawrence Erlbaum Associates, 1982.

Sutton-Smith, B. & Rosenberg, B. G. The sibling. New York: Holt, Rinehart, & Winston, 1970.

Townsend, P. The family life of old people: An inquiry in East London. Glencoe, Illinois: Free Press, 1957.

Troll, L. E. The family of later life. A decade reivew. Journal of Marriage and the Family, 1971, 33, 263-290.

Troll, L. E. Early and middle adulthood. Monterey, California: Brooks/Cole, 1975.

Troll, L. E. & Smith, J. Attachment through the life span: Some questions about dyadic bonds among adults. Human Development, 1976, 19, 156-170.

Troll, L. E., Miller, S., & Atchley, R. Families of later life. Belmont, California: Wadsworth, 1979.

Waters, E., Wippman, J. & Sroufe, L. A. Attachment, positive affect, and competence in the peer group: Two studies in construct validation, Child Development, 1979, 50, 821-829.

Wrightsman, L. S. & Deaux, K. Social psychology in the 80's. (3 rd ed.). Monterey, Calif: Brooks/Cole, 1981.

Table 1

Intercorrelations, Means, and Standard Deviations of Variables

Variable	Intercorrelations 1	2	3	4	5	Mean	S.D.
1. Sibling help	1.00	.40	.75	-.23	.05	16.51	4.35
2. Attachment behaviors		1.00	.35	.10	.00	12.24	5.54
3. Feelings of attachment			1.00	-.18	.04	50.00	9.98
4. Sibling obligation				1.00	.19	12.92	3.12
5. Sibling conflict					1.00	5.26	2.35

Table 2

Decomposition of Effects in the Path Model

Variable	Direct	Indirect	Total
Attachment behaviors	.19	--	.19
Feelings of attachment	.66	.07	.73
Sibling obligation	-.13	.03	-.10

BEST COPY AVAILABLE

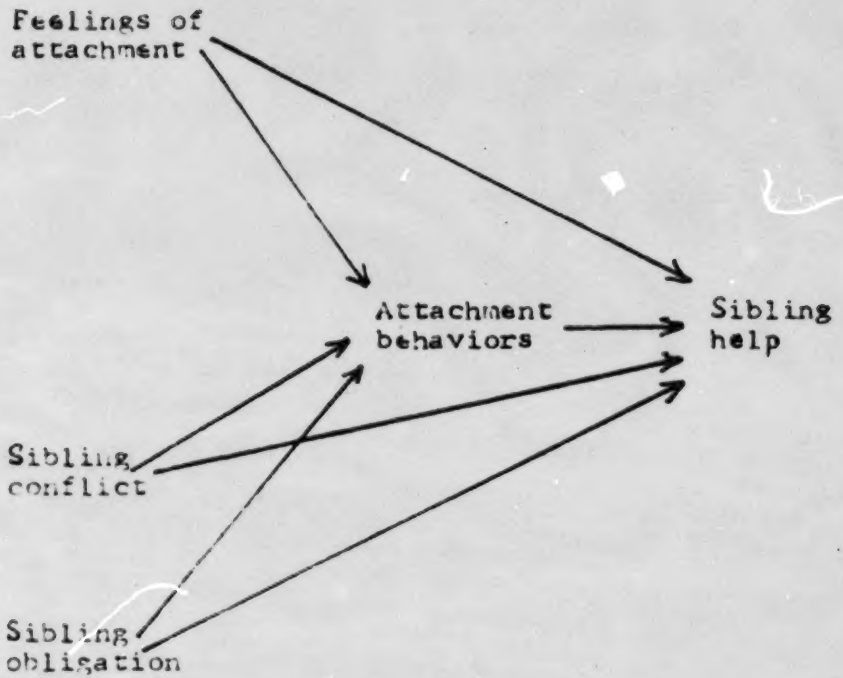

Figure 1. Hypothesized Model of Variables Influencing Sibling Help.

BEST COPY AVAILABLE

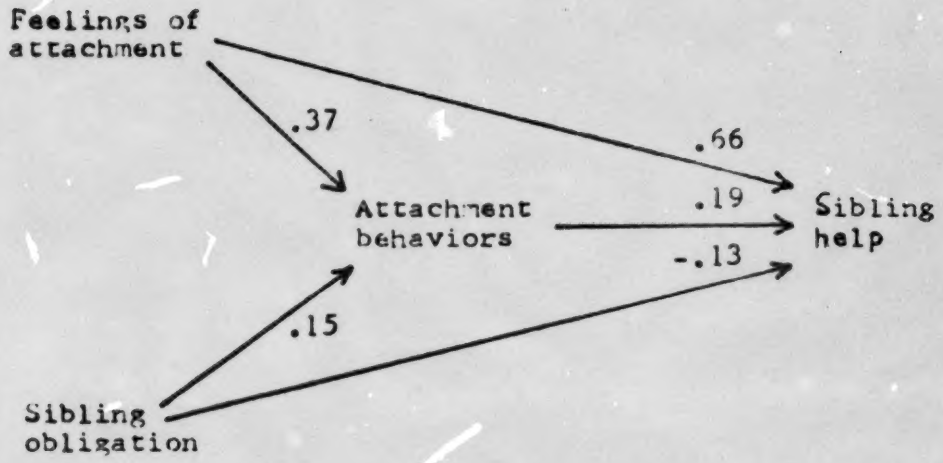

Figure 1. Path Diagram of Sibling Help. (Path coefficients are standardized partial regression coefficients.)

Footnotes

1. Data on which this paper is based were drawn from a larger study supported by the AARP Andrus Foundation. The assistance of Jon Nussbaum and Philip Sutton in the collection of data is gratefully acknowledged.

2. Department of Psychological Sciences, Purdue University, West Lafayette, Indiana 47907.